

developing from the cross a hybrid maize plant representative seed of which having been deposited under ATCC Accession Number _____.

34. (New)

A method of making an inbred plant comprising:
obtaining a hybrid maize plant 39R62 and
generating from said hybrid maize plant a parental inbred parent line, said line selected from the group consisting of GE570800 deposited as _____ and GE533276 deposited as _____.

35. (New)

The method of claim 34 wherein said generating step comprises using double haploid breeding.

36. (New)

A method of producing a 39R62 progeny maize plant in a plant breeding program comprising:
obtaining the maize plant, or its parts, produced by growing the hybrid maize seed designated 39R62,
utilizing said plant or parts thereof as a source of breeding material, and preferentially selecting for a 39R62 progeny plant with at least two desirable morphological or physiological characteristics of the plant or parts thereof produced by growing the hybrid maize seed designated 39R62,
said at least two morphological or physiological characteristics selected from the characteristics listed on the chart in Tables 1-4, thereby producing said progeny maize plant.

37. (New)

The 39R62 progeny maize plant produced by the method of claim 36, wherein the pedigree of said 39R62 progeny maize plant has two or less cross-pollinations to a maize plant other than the hybrid maize seed designated 39R62.

38. (New)

The method of claim 36 wherein the maize plant breeding program comprises one or more of the following: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, making double haploids and transformation techniques.

39. (New)

A method for producing a population of 39R62 progeny hybrid maize plants comprising:

- (a) obtaining a first generation progeny maize seed produced by crossing the maize plant produced by growing the hybrid maize seed designated 39R62 with a second maize plant;
- (b) growing said first generation progeny maize seed to produce F_1 generation maize plants and obtaining self-pollinated seed from said F_1 generation maize plants;
- (c) growing said self-pollinated seed to produce F_2 maize plants and obtaining further self-pollinated seed from said F_2 maize plants; and
- (d) repeating the steps of growing and harvesting successive filial generations by selecting for morphological and physiological traits in Table(s) 1-4 to obtain a population of 39R62 progeny hybrid maize plants.

40. (New)

The population of 39R62 progeny hybrid maize plants produced by the method of claim 39, said population, on average, deriving at least 50% of its ancestral alleles from 39R62.

41. (New)

A hybrid seed selected from the population of 39R62 progeny hybrid maize plants produced by the method of claim 39, said hybrid seed deriving at least 50% of its ancestral alleles from 39R62.

42. (New)

The method of claim 39, further comprising applying double haploid methods to said F_1 generation maize plant or to a successive filial generation thereof.

43. (New)

A method of producing an hybrid maize plant derived from the maize variety 39R62, the method comprising the steps of:

- (a) preparing a progeny plant derived from maize variety 39R62 by crossing a plant of the maize variety 39R62 with a second maize plant, wherein a sample of the seed of the maize variety 39R62 was deposited under ATCC Accession No. _____;
- (b) crossing the progeny plant with itself or a second plant to produce a seed of a progeny plant of a subsequent generation;
- (c) growing a progeny plant of a subsequent generation from said seed and crossing the progeny plant of a subsequent generation with itself or a second plant; and
- (d) repeating steps (b) and (c) for an additional 3-5 generations to produce a hybrid maize plant derived from the hybrid variety 39R62.